2-4-05

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTORS: Kegeon Kwun, et al

ATTY DKT NO.:

P-17.116(CIP)

SERIAL NO.: 10/665,609

**EXAMINER:** 

Kenneth Whittington

FILED:

September 19, 2003

Method and Apparatus Generating

TITLE: and Detecting Torsional Wave Inspection of

Pipes or Tubes

ART UNIT NO.:

2862

TO:

COMMISSION FOR PATENTS

ATTN: Response/No Fees Washington, D.C. 20231

## **RESPONSE TO OFFICE ACTION OF JANUARY 11, 2005**

Dear Sir:

This is in response to the Office Action dated January 11, 2005.

## IN THE CLAIMS

The claims 1 - 22 are as originally filed and are indicated herein below:

1. (Original) In a method for nondestructive inspection of a pipe or tube for anomalies therein, which anomalies can indicate defects such as notches, cuts, cracks, wear or corrosion, using magnetostrictive techniques, of the type which include inducing residual magnetization in at least one thin ferromagnetic strip; circumferentially pressing said thin ferromagnetic strip against said pipe or tube; first locating a transmitter coil adjacent said thin ferromagnetic strip; second locating a receiver coil adjacent said thin ferromagnetic strip; generating a pulse signal in a transmitter control circuit and delivering it to said transmitter coil, said transmitter coil creating magnetostrictively a guided wave in said thin ferromagnetic strip, said thin ferromagnetic strip being coupled to said pipe or tube so that said guided wave propagates along the length of said pipe or tube; generating and delivering a pulse signal; magnetostrictively detecting by said